§58.921

§58.921 Concentration.

Concentrating by evaporation shall be accomplished with a minimum of chemical change in the product. The equipment and systems used shall in no way contaminate or adversely affect the desirability of the finished product.

§ 58.922 Thermal processing.

The destruction of living organisms shall be performed in one of the following methods: (a) The complete incontainer method, by heating the container and contents to a range of 212 °F to 280 °F for a sufficient time; (b) by a continuous flow process at or above 280 °F for at least 2 seconds, then packaged aseptically; (c) the product is first processed according to methods as in paragraph (b) of this section, then packaged and given further heat treatment to complete the process.

$\S 58.923$ Filling containers.

- (a) The filling of small containers with product shall be done in a sanitary manner. The containers shall not contaminate or detract from the quality of the product in any way. After filling, the container shall be hermetically sealed.
- (b) Bulk containers for the product shall be suitable and adequate to protect the product in storage or transit. The bulk container (including bulk tankers) shall be cleaned and sanitized before filling, and filled and closed in a sanitary manner.

§ 58.924 Aseptic filling.

A previously ultra pasteurized product shall be filled under conditions which prevent contamination of the product by living organisms or spores. The containers prior to being filled shall be sterilized and maintained, in a sterile condition. The containers shall be sealed in a manner that prevents contamination of the product.

§ 58.925 Sweetened condensed.

After condensing, the sweetened condensed product should be cooled rapidly to about $85~^\circ\mathrm{F}$ to induce crystallization of the oversaturated lactose. When the desired crystallization is reached further cooling is resumed to $68^\circ\mathrm{-70~^\circ\mathrm{F}}$.

§58.926 Heat stability.

Prior to thermal processing of concentrated products and where stabilizers are allowed, tests should be made on the heat stability of the product to determine necessity for, and the amount of stabilizer needed. Based on the stability tests, safe and suitable stabilizers and emulsifiers may be added.

§58.927 Storage.

Finished products which are to be held more than 30 days should be stored at temperatures below 72 °F Precautions shall be taken to prevent freezing of the product.

§58.928 Quality control tests.

All dairy products and other ingredients shall be subject to inspection for quality and condition throughout each processing operation. Quality control tests shall be made on flow samples as often as is necessary to check the effectiveness of processing and manufacturing and as an aid in correcting deficiencies. Routine analyses shall be made on raw materials and finished products to assure adequate composition control. For each batch or production run a keeping quality test shall be made to determine product stability.

§ 58.929 Frequency of sampling for quality control.

- (a) Composition. Sampling and testing for composition shall be made on batches of product as often as is necessary to control composition. On continuous production runs, enough samples shall be taken throughout the run to adequately assure composition requirements.
- (b) Other chemical analysis or physical analysis. Such tests shall be performed as often as is necessary to assure compliance with standards, specifications or contract requirements.
- (c) Weight or volume control. Representative samples of the packaged products shall be checked during the filling operation to assure compliance with the stated net weight or volume on the container.
- (d) Keeping quality and stability. A minimum of one sample from each batch of product or one representative

sample per hour from a continuous production run shall be taken. For continuous runs, samples shall be taken at the start, each hour, and at the end of the run. Samples should also be taken after resumption of processing following an interruption in continuous operation. Each sample shall be incubated at 90 °F to 100 °F for seven days.

§ 58.930 Official test methods.

- (a) Chemical. Chemical analysis, except where otherwise prescribed herein, shall be made in accordance with the methods described in the latest edition of Official Methods of Analysis of the AOAC or by the latest edition of Standard Methods for the Examination of Dairy Products.
- (b) *Microbiological*. Microbiological determinations shall be made in accordance with the methods described in the latest edition of Standard Methods for the Examination of Dairy Products.

§58.931 General identification.

Bulk shipping containers shall be legibly marked with the name of the product, net weight, name and address of manufacturer, processor or distributor, a lot number and coded date of manufacture. Consumer sized containers shall meet the applicable regulations of the Food and Drug Administration.

QUALITY SPECIFICATIONS FOR RAW MATERIALS

§ 58.932 Milk.

The raw milk shall meet the requirements as outlined in §§58.132 through 58.138. Unless processed within two hours after being received, it shall be cooled to, and held at a temperature of 45 °F or lower until processed.

§58.933 Stabilizers.

Shall be those permitted by the Food and Drug Administration's "Standards of Identity" as optional ingredients for specific products. Stabilizers shall be free from extraneous material, be of food grade quality and not be in violation of the Federal Food, Drug and Cosmetic Act.

§58.934 Sugars.

Any sugar used in the manufacture of sweetened condensed or sterilized milk products shall be refined, and of food grade quality.

§58.935 Chocolate and cocoa.

Such products used as flavor ingredients shall meet the requirements of the Food and Drug Administration, "Definitions and Standards of Identity for Cocoa Products."

REQUIREMENTS FOR FINISHED PRODUCTS
BEARING USDA OFFICIAL IDENTIFICATION

§ 58.936 Milk.

To process and package evaporated and condensed milk of ultra-pasteurized dairy products eligible for official identification with the USDA Quality Approved Inspection Shield the raw incoming milk shall meet the requirements as outlined in §§58.132 through 58.136. Unless processed within two hours after being received, it shall be cooled to, and held at a temperature of 45 °F or lower until processed.

§ 58.937 Physical requirements for evaporated milk.

- (a) Flavor. The product shall possess a sweet, pleasing and desirable flavor with not more than a definite cooked flavor. It shall be free from scorched, oxidized or other objectionable tastes and odors.
- (b) Body and texture. The product shall be of uniform consistency and appearance. It shall be smooth and free from fat separation, lumps, clots, gel formation, coarse milk solids precipitate or sedimentation and extraneous material.
- (c) *Color.* The color shall be of a natural white or light cream.
- (d) *Degree of burn-on.* The interior walls of the container shall not show excessive burn-on of product (product fused to more than 75 percent of the inner surface of the can).
- (e) Keeping quality. Samples incubated at 90-100 °F shall show no sensory, chemical or microbiological deterioration after seven days.

§ 58.938 Physical requirements and microbiological limits for sweetened condensed milk.

(a) Flavor. Shall be sweet, clean, and free from rancid, oxidized, scorched,